THE GENESEE FARMER.

Vol. IV. **ROCHESTER, JULY 5, 1834.** **No. 27.**

Published by Luthe Tucker.

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2,00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

☞ New subscribers can be supplied with the first, second and third volumes.

THE GENESEE FARMER.

SATURDAY, JULY 5, 1834.

On Manures for Farms and Gardens.

In several respects, a garden may be considered a farm in miniature; and what we have to say on this occasion, may be applicable to both.

"Any substance added to the soil," says the Edinburgh Encyclopædist, "either to supply a deficiency, or to rectify what is amiss, is called a MANURE." Thus for the production of various plants, *clays* are improved by the addition of *sand;* and on the contrary, light *sands* are improved by the application of *clay* or heavy loam. It is on this principle that we account for the ameliorating effects of old leached ashes, or such as have long been exposed to the weather, and entirely deprived of the alkali. We here speak strictly in reference to ashes which are free from pieces or particles of charcoal. It is very rare however, to find ashes of this description; and we may rest satisfied that charcoal is a most valuable addition.

Charcoal like water, has the power of absorbing various kinds of gases in remarkable quantities. Thus, that which is prepared from boxwood will take in and hold, ninety times its own bulk or volume of ammoniacal gas; fifty-five times its bulk of sulphuretted hydrogen; and thirty-five times its bulk of carbonic acid. Dr. *Turner* thinks "this effect is owing to the peculiar porous texture of that substance, which enables it in common with most spongy bodies, to absorb more or less of all *gases*, *vapors*, and *liquids*, with which it is in contact. This property is most remarkable in charcoal* prepared from wood, especially in the compact varieties of it, the pores of which are numerous and small. *It is materially diminished by reducing the charcoal to powder;* and in plumbago which has not the requisite degree of porosity, it is wanting altogether." It will therefore be proper *not to pound it too fine* when it is to be applied to beds in the garden.

"Charcoal," says the same author, "absorbs *vapors* more easily than *gases*, and *liquids* than either." Experiments have been made to determine the quantity of water and common air absorbed by different kinds of charcoal when exposed one week to the atmosphere; and *Allen* and *Pepys* found that which is obtained from the fir to gain thirteen per cent.; while that procured from the beech and from the oak gained more than sixteen per cent; and as "the absorption was most rapid during the first twenty-four hours," we may perceive the great supply of nourishment which this substance may yield to plants when it is broken and mixed with the soil.

Charcoal we believe is a good manure for every kind of soil in this district. Its value has been too little understood; and we have always regretted to see the sweepings of the smith's shop, or of the coal house, thrown into the highway as of no use when the plants in the garden were languishing for want of its assistance.

It possesses other properties however, besides that of absorbing gases, vapors, and water. Like sand, it renders the soil more friable; and by imbibing the calorific rays in consequence of its blackness, it becomes more heated by the sun, and vegetation in spring, is accelerated. It is also said that many insects are averse to charcoal.

We wish to remind those who have laid out their gardens on light sandy soils, of the valuable properties of lime in preserving common manures by its CHEMICAL ENERGY. Fresh meat put into a barrel without *salt*, and dung put on sandy soil without *lime*, may answer for a time; but cultivators may depend on it that the difference between the two cases is not so great as at the first glance, they might imagine. The manure in such a soil is said to "leach away," and we will not contend about terms; but unless it has something *to preserve it* when it is put there, it will soon disappear.

We have chosen to address ourselves to gardeners in the first place, because the proprietors in most cases have their attention confined to a small spot of ground to which they can afford to give the highest cultivation; but farmers may also profit by our hints. No housekeeper begrudges the salt that preserves his meat, and no horticulturist should begrudge a liberal supply of lime for his garden to preserve the manure; and we will further remark for his encouragement that lime is not subject either to decay or evaporation like some other manures, but will continue to benefit the soil for ages to come.

* In contradistinction to charcoal prepared from bones, sugar, &c.

The Cedar Bird and Oriole.

(In a letter from a correspondent.)

Although many of our cherries were destroyed by the snow storm, we should still have had a comfortable supply, had it not been for the voracious Cedar birds. I find no way to deal with them so good as with small shot. This we have done to some considerable extent, and have thinned their ranks for the time being; but so numerous have they become in this country, and so scarce is the fruit this season that they commonly prey on, that they will not allow a cherry to ripen; and unless carefully watched, they devour all the best of the strawberries. They have also begun already to eat the scarcely colored berries of the Tartarean Honeysuckle.

If all those who have cherry trees, would do their DUTY and kill their proper share of these marauders, the task would not fall so heavy on others who mean to defend their property. I am satisfied that were we to let the Cedar birds come and go unmolested, we should never see a ripe cherry; but many people, strange as it may seem, are not used to ripe cherries,—eating them in a half matured state, which gives them a better chance to compete with these devourers. We have no fruit however, that is more unwholesome than the cherry when eaten in that state; and certainly in flavor it is miserably deficient.

The Baltimore Oriole or Hanging bird is also voracious, but very different in its character. So far in the season, we have not had much cause for complaint; but when the raspberries begin to ripen, we shall hear from him. When on a plundering expedition, his note is very sharp and shrill. On pears and apricots, which will not fatten him this year, he is more destructive than the Cedar bird. He is *too bad* to be tolerated, though a fine bird in some other respects.

For the Genesee Farmer.

On the Culture of Melons.

The striped bug is the greatest enemy to our melons, cucumbers, and squashes. The time of their first coming rarely varies more than two or three days, and these are about the commencement of summer. The excellent contrivance recommended by "B." at page 185 may set them all at defiance; but so many people cultivate those fruits, who will be unwilling to incur that expense, or even to provide wooden boxes and millinet, that for their accommodation I am going to propose a substitute,—inferior indeed, but which with a little attention may be found to answer a good purpose.

As the plants increase in size, they are evidently in less danger; and therefore early planting is to be preferred. By means of any of such hot beds as those described at page 61, 137, or 185, and a slight covering in cool nights, several weeks may be gained on the season; and when the striped bug first appears, the plants will be well advanced. There is something very singular however, in the movements of that insect. Oftentimes a whole squadron will attack a single plant, or one of its leaves, while other plants at the distance of only a few feet, will remain untouched. In these cases the gardener must speedily interfere or his hopes will be blighted.

In the present season, I had some rare kinds of melons which came up after the striped bug appeared. I examined them in the morning and left them in fine condition, to be absent during the day. On my return, most of the plants were destroyed by these creatures, and only one or two mutilated ones were left. They had also attacked some of larger growth. To save these, I went to the lime cask, and taking out what was air-slacked, I powdered the plants with no sparing hand. This bug has a great aversion to quick lime; and unless it can get on the under side, or on some *unwhitened* part of a leaf, it is off in a hurry. In the present instance, the lime proved a great protection; very few bugs have alighted, and not in numbers sufficient to endanger the plants. It is best to repeat the sprinkling however, as often as once in two or three days.

The Valparaiso Squash is one of their most favorite kinds of food. The plants should be frequently examined, not only on their own account, but lest the bugs should increase, and suddenly descend in colonies on the melons in other parts of the garden, for it is probable they can

communicate such discoveries to each other. It is therefore important to keep their numbers within reasonable bounds. For this purpose I attack them in the cool of the morning when they are unable to fly, or at least very tardy in their movements; and the destruction of one or two hundred at a time, has been speedily and readily effected.

A PRACTICAL GARDENER.

For the Genesee Farmer.

On the best Time for Applying MANURE.

I have observed that on several summer fallows newly turned over, the farmers have just carted out their barn yard manure. It struck me that the labor was not well timed. I have believed that all manures of a perishable nature, should not be applied until near the time when it should begin to operate on the crop. I cannot persuade myself that manure from the stable or barn yard, can be taken out on the field, and be left exposed to the weather for three months before seeding time without considerable loss. What I saw was thrown down in heaps, which must ferment, and of course much of it must pass off in a gaseous form.

When stable manure is not applied to crops in the spring, in my opinion it ought to remain undisturbed through the summer; for when trodden down by cattle, it will suffer less loss in that state than in any other except it be made into compost.

A. X.

For the Genesee Farmer.

MR. TUCKER— We, the undersigned, should be highly gratified to see the following facts appear in the Genesee Farmer.

On the 27th inst. a young lady by the name of *Sarah Worden*, spun, on a common big wheel, from sunrise until sunset, seven runs (140 knots) of yarn, and after sunset she spun eleven knots twenty-five threads, making in all seven run eleven knots and twenty-five threads, and but for the imperious commands of her father, would have overreached eight runs, and been ready to retire at the early hour of half past eight o'clock, P. M. She did her work extremely well. The lady above named is but fourteen years of age the present month. She resides at her father's in the town of Shelby, Orleans county. Besides receiving the applause of all who have become acquainted with the performance of this almost unparalleled feat, she has been, or is to be, presented by her two cousins with two superior dresses. Yours, in haste,

CORNELIUS ROBERTS,
HARVEY ROBERTS,
STEPHEN H. KINNE.

Shelby, Orleans co., June 30, 1834.

REPELLING OF INSECTS.—Taking the earth away from the roots of trees, and returning back earth mixed with a small quantity of sulphur, will keep insects from ascending the trees. Other repellants of insects may answer the purpose for one spring—such as quick lime, fine salt, old urine, strong soap suds, a strong decoction of tobacco, onions, &c.—*Farm. Assist.*

ERRATA—Page 185, col. 3, line 10 from *the bottom*, for *estabed* read *established*—page 186, col. 2, line 20 from *the top*, for *arneria* read *armeria*—page 186, col. 2, line 23 from *the bottom*, for "cornescens" read carnescens.

Horticultural Society.

The summer meeting of the Domestic Horticultural Society of the Western part of the State of New York, was held at Blossom's Hotel, Canandaigua, on Friday the 27th June.

It could not be expected, this season, when winter has more than "lingered in the lap of May," that the exhibition of fruits, flowers, and culinary vegetables would equal those of former summers. Nevertheless, on bringing together their various offerings, the members of the Society found much more cause of gratulation at the success achieved, than regret that greater display could not be made.

The strawberries were very luscious, and the largest ever produced by the Society. The cauliflowers, cabbages, peas, potatoes, carrots, lettuces, radishes, cucumbers, &c. were of excellent quality and size.

The flowers presented by the ladies of the Society, comprising almost every kind and variety now in season, were particularly beautiful; doing credit by their perfection, to the taste and skill with which they had been cultivated.

The committee on fruits and vegetables, were Col. Peyton, Messrs. Granger and Stout, who awarded the following premiums:

Gen. Whiting, best quart of strawberries, .$1
Col. Bogert, next best.....do..... 50
Mrs. Gallagher, gooseberries,.....1
Mr. C. Butler, best peck green peas,.....1
Mr. A. Duncan, next best...do..... 50
Mr. Greig, best onions, ... 50
Mr. Greig, best potatoes,.....1
Gen. Whiting, next best do..... 50
Mrs. Gallagher, best 3 cabbage heads,.....1
Mr. Greig, next best.....do..... 50
Mrs. Gallagher, best 6 lettuce plants,.....1
Mr. Greig, next best.....do..... 50
Mr. Z. B. Stout, best 25 radishes,..... 50
Mr. Greig, next best....do..... 25
Mr. Greig, best dozen blood beets,..... 50
Mr. A. Duncan, best 6 cucumbers,..... 50
Mr. Greig, best dozen carrots,..... 50
Mr. C. Butler, next best do..... 25
Mr. Greig, best cauliflower,.....1
Mr. C. Butler, next best do..... 50

The committee on flowers were Mrs. Ross of Canandaigua, Mrs. Bogert of Geneva, and Mrs. Stout of Richmond—they awarded as follows:

Mrs. C. Butler, for the most beautiful monthly rose,..... 50
Mrs. Oliver Phelps, the most beautiful hardy rose,..... 50
Mrs. B. Whiting, next best do..... 25
Mrs. Greig, the most beautiful specimen of flowers, 6 sorts,.....1
Mrs. Butler, next best.....do..... 75
Mrs. Whiting, next best.....do..... 50

Discretionary Premiums.

Mrs. Balmanno, lot of beautiful flowers,....1
Mrs. Butler, yellow trumpet honeysuckle, and white digitalis,..... 50
Mrs. Greig, hydrangea,..... 50
Mrs. Butler, collection of fine pinks,..... 50

At 3 o'clock, the Society, honored by the presence of a number of respectable visitors, sat down to an excellent dinner, provided by Col. Blossom, from his own abundant supplies, and the very palatable contributions of the Society.

The President of the Society, John Greig, Esq. presided at the table, assisted by General Bowen Whiting.

The utmost good feeling prevailed; and the "distress" of the country was momentarily forgotten by all parties, in the enjoyment of the rare products of the field, the garden, and the vineyard.

During the festive scene, the question—elsewhere so often and so emphatically asked—"Where is the treasury?" obtruded itself upon the notice of the Society.

No one had "assumed the responsibility" of 'removing the deposites" of the Society, or dismissing their "Secretary of the Treasury." This estimable officer had hitherto been remarkably punctual in his attendance and payments. Nor was the Society aware of any difference of opinion between the "Executive" and himself as to the performance of the duties "assigned by the law and the charter" to the latter. The officer, however was absent on a journey. And it seemed awhile doubtful, whether the members, to whom premiums had been awarded, were to receive aught but "glory." In this exigency, on motion of a member, the "President nominated, and by and with the advice and consen of the" Society, unanimously given, "appointed" Francis Granger, Esq. Treasurer pro. tem.

The "Pet Bank," thus created without any "derogation from the constitution and laws," cheerfully and promptly met the run upon it, for the fulfilment of the "contracts and extra allowances" in "hard money." And whatever may be thought by others of the "Safety Fund System," we cannot but cordially approve of its application, in this instance, to the pecuniary affairs of the Horticultural Society. It is hoped, that all other "pressures" may be as easily and happily removed. Many excellent toasts were given, which, not having been furnished with copies, we regret our inability to publish. The dinner closed with a libation to the "immortal memory of Lafayette."

It was, on motion, ordered that the annual meeting of the Society be held, the ensuing autumn, at Lyons—and the following named gentlemen were appointed the committee of arrangements, to fix the time, offer the premiums, and perform the other usual duties of the occasion:—Gen. Wm. H. Adams, Dr. Beaumont, Messrs. G H. Chapin, Samuel Hecox and E. C. Howard. The Society then adjourned.

Z. BARTON STOUT, *Rec. Sec'y.*

On Suckering Corn.

I had the pleasure, about four years ago, to spend a day in company with old Mr. Macon of North Carolina, when our conversation was principally on subjects of agriculture; and among others the cultivation of Indian corn. After having inquired whether I had the suckers which grew from the roots of the corn pulled off, as is the common practice, and received my answer in the affirmative, he informed me that he had suffered them to remain, having, from repeated experiments, ascertained that they did not injure the corn; but on the contrary, the suckers more frequently than otherwise produced good ears of corn; and that if they failed to do so, there was an increase of fodder. I have since tried the experiment, and witnessed the following results: That after carefully examining the ears of corn on the stalks producing suckers, they were found to be as good as the ears on the surrounding stalks not producing them—that a large majority of the suckers produced good corn, though the ears generally were smaller than those on the mother stalk, and that (of course) there was an increase of fodder. Without entering into an inquiry,

whether corn ought not to be planted so thick as to prevent its producing suckers, (if thick planting will prevent it, of which I am not sure,) or whether the pulling them off may not injure the corn by inflicting wounds on the stalks, I can now safely recommend Mr. Macon's practice, as saving the time and labor of pulling off suckers, and what is of more consequence, as producing an increase of the crop of corn and fodder. I ought to add, that none but the suckers growing from the root ought to be suffered to remain.—W. M. WATKINS. Charlotte co., March 4.—*Farmer's Register.*

Hay Spreading Machine.

The subscriber has invented and put in operation a machine for spreading hay, from the swath, and for stirring and turning it afterwards, for which he has obtained a patent. It is attached to a pair of wheels, and drawn by one or two horses; will do the work of six or eight men or boys, and greatly shorten the process of curing hay. It is of simple construction, is easily kept in repair, and may be conveniently attached to any pair of wheels on the farm. The machine has been examined in operation by several farmers and other gentlemen, who expressed high satisfaction with its performance. Farmers are invited to see it in operation, either at the farm of Gen. Stephen Van Rensselaer, near Albany, or of the subscriber near Hudson, at which latter place the machine may be had, or patent rights obtained. JOAB CENTER.

June 28, 1834.

Maple. (Acer.)

There are nine sorts of this tree, enumerated by botanists, in this country; the most valuable of which is the sugar maple; of which kind only something shall be said.

Where the farmer wishes to save his sugar maple trees, he ought not to tap them in the common way; but, instead of this, bore a hole two or three inches into the tree, out of which the sap can be drawn; and let it be plugged up after the sap has done running.

The method of making the sugar is too well known to need any minute description. It would be often well, however, if those who make this sugar, were to observe more cleanliness, in regard to the vessels in which the sap is gathered. Old troughs, which have lain for years exposed to the weather, are not very proper receptacles for the sap, if regard be had to the cleanliness of the sugar, and of course its value. Some make use of vessels made in the form of pails, which they keep for the purpose, and this is certainly more cleanly. The vessels can be laid up every year, after the time of using them is past, and be preserved many years.

In clearing pasture lands which abound with sugar maple, it would be well to preserve these trees as they do no injury to the pasture; but the difficulty is, that as soon as they become more exposed to the winds they are blown down. But let all the small maples in such grounds be left, and in a few years these will grow up with sufficient strength of root to withstand the winds, and become an article of profit, and ornamental to the farm. They may also be very easily dug up in the woodlands, and transplanted into such pastures.

This is a piece of economy which the farmer would do well to observe, if he wishes his farm to yield due supplies of sugar, when that article shall have become more scarce. Twenty trees to an acre, would do little or no injury to the pasture; and ten acres of such a maple orchard would, in a few years, yield no inconsiderable quantity of sugar. By boring the trees as above directed, no essential injury is done to them; so that they might be increasing in growth for half a century, or perhaps double that length of time.

The sugar of the maple may be grained in the manner directed for graining the sugar of the beet; or it may be done in the vessels in which the sap is boiled, if it be not too large for the purpose.

The trees may be raised from cuttings, or from seeds.—*Farmer's Assistant.*

Savoy Cabbages.

The green curly Savoy cabbage is one of the finest garden vegetables that is grown, and ought to take the place of every kind of cabbage put up for winter's use for the table. It is as hardy and as easily cultivated as any other kind of cabbage; it is much more delicate, sells more readily, and as many, indeed rather more, can be grown from a square in the garden, or from an acre of land.

An acre of land has 4310 square yards—equal to 43,560 square feet: two feet wide each way is enough to plant the Savoy cabbage; thus, an acre would yield 10,890 cabbages, which require as little cultivation as potatoes, after the ground is well prepared, and the plants are planted out, and which would bring, at the moderate price of one cent apiece, the enormous sum of one hundred and eight dollars and ninety cents.—*N. Y. Farmer.*

From the Gardener's Magazine.

Uselessness of Earthing Up

GROWING CROPS OF POTATOES.

SIR—I would offer a few hints that may aid the endeavors of those who advocate benefitting the condition of the poor; they may contribute to increase the objection which some have urged against exhausting the powers of labor. Mr. Knight's observations regarding the potatoe are valuable; but there is one laborious operation commonly resorted to in cultivating this vegetable, which I think has not been sufficiently considered; and which I am convinced by more than ten year's experience, is superfluous. Observing that a farmer, in managing a field of potatoes along side of mine, did not earth them up, but simply flat, hoed the surface of the soil to clear away the weeds, while I had mine earthed up with great care, I determined on noticing the difference in taking up the crop; and, to my astonishment, he had fourteen tons to the acre, while I had not more than half the quantity, and his potatoes were of a more marketable quality than mine, being generally of a good size, while mine were large and small. The result induced me to question the farmer, and he told me it was a practice he had followed for many years, as he thought the earthing up was worse than labor thrown away; that a year or two before he had obtained 19 tons per acre by the same management. This statement put me upon considering the principles from which such a result was founded; and it appeared to me that, by drawing up the earth over the potatoe, in sloping ridges, it was deprived of its due supply of moisture by the rains; for, when they fell, the water was cast in the ditches. Further, in regard to the idea that, by thus earthing up, the number of tubers is increased; the effect is quite the reverse, for experience proves that a potatoe an inch only under the surface the earth will produce a greater number of tubers than one planted at the depth of a foot. From reasoning thus, I determined to adopt the practice; however, such is the force of prejudice, that I have been able to make but few proselytes. A year or two since, I prevailed on a clergyman to try the practice on a strip of half an acre, running through a large field, treated in the common manner; and he told me that, on taking up the crop, he did not find much difference in the gross quantity, but that those which had been earthed up were, more generally, of a good size; not so many large and small as the other part of the field. I have no doubt, if potatoes are planted shallow, and placed wide enough apart to admit of the stems being laid down after the young potatoes are formed, and to have the earth between them thrown over five or six inches thick, so as to form a flat surface, that it would increase the crop. But this is a very different operation from that I object to.

I am, sir, yours, &c.

JOSEPH HAYWARD.

From the Le Roy Gazette.

WHITE HAVEN.—This little village which has sprung up within a few months, on the east bank of Grand Island, bids fair to become a place of considerable importance. The Island is owned by a company of individuals from Boston, who have erected about thirty houses, together with workshops, a large steam saw mill, store, &c. &c. Every improvement, including the clearing of land, chopping of thousands of cords of wood, and the getting out of an immense deal of ship stuff for the Boston market, has been made without the use of *ardent spirits.* Not a drop is used on the Island. The Buffalo Patriot says:—

"This company have introduced into their Island, the novel and most convenient plan of getting out ship frames ready to be put together for exportation. We understand they are now shipping on board canal boats, at White Haven, the frames and entire timbers for three large merchant ships, which they have contracted to deliver in Boston. One is an Indiamen, one for the Mediterranean, and another for the South American trade. The moulds are made here from the drafts of the ships, and the work all prepared on the spot. An immense saving in the freight must accrue by this method of working the timber, as all the waste wood usually cut off at the yard is saved, and the late reduction of tolls on ship timber, plank, &c. carried in boats has rendered the transportation comparatively cheap and expeditious. It must, we think, be a novel sight to the Bostonians, to see their ships, already got out, delivered at their yards from Grand Island, a distance of near 800 miles, as cheap as they can be brought from their own hills, in Worcester."

From a Foreign Journal.

CARRIER PIGEONS.—A society of pigeon fanciers at Ghent, give an annual prize for the best carrier pigeon. This year it was decided on the 24th July, when 24 birds were sent off from Rouen, where they had been conveyed from Ghent. They were started at 55 minutes after nine in the morning. The first which arrived belonged to M. Deleuw, and made the transit in an hour and a half, gaining the prize; 1 reached Ghent in two hours and a half, 3 arrived in the course of the day, and 4 were lost. The distance, in a direct line, is about 150 miles.

On the Culture of Clover.

Few things have contributed more largely to the modern improvement of husbandry, than the introduction of clover, in connection with the rotation of crops. This plant serves to ameliorate and fertilize the soil, and at the same time it affords an abundance of wholesome food for every description of farm stock. Whether left out for winter stores, for soiling in the yard, or fed off by stock, but few crops surpass it in the quantity of cattle food which it affords. Although cultivated in Holland and Flanders from an early period, with great advantage, it was not introduced into Great Britain till the 16th century. At present, clovers enter largely into the succession of crops there, on all soils, and in every productive course of management. They were principally instrumental in giving to Flanders its high celebrity, as an agricultural country, greatly in advance, in improvement, of the states around it. The clover system has converted some of the poorest districts of England into the most productive and profitable. In the United States it is comparatively of recent introduction; and even at this day its benefits are but partially appreciated or applied as they ought to be. In connection with gypsum, clover first became a subject of notice and culture in the counties about Philadelphia, and in the county of Dutchess, some forty years ago; and we are much indebted to the example and writings of Chancellor Livingston, Judge Peters, and other gentlemen of learning, wealth and enterprize, for the improvement and wealth which it has conferred on our land. Many of our farmers have yet much to learn, before they can realize the full benefits which it is capable of affording in the profits of the farm. Although botanists enumerate nearly fifty species of the clover family, our present remarks are intended to apply merely to the common red kind,(*Trifolium pratense.*)

There are three faults in the management of clover, which we design briefly to notice, in reference to alternate husbandry. These are,

1. *Too little seed is usually sown.*—The object of the clover crop is to procure a cheap food for animals and plants. Few if any crops surpass it in the quantity which it affords of these,—and few exhaust the fertility of the soil less. One farmer sows four or six pounds of seed to the acre and gets in return a thin but coarse crop of hay or pasture. Another sows ten to fourteen pounds, obtains double the burthen of the first, and at a trifling extra expense of less than a dollar to the acre for seed, while his land is doubly benefitted by the green crop to be ploughed in. From ten to fourteen pounds of seed should be sown to the acre, whether the object be to benefit the stock or the land. The product will be somewhat in the ratio of the seed sown; and the advantages of heavy stocking, both in the hay and to the soil, will far out balance the cost of the extra seed.

2. *Clover lays are permitted to remain too long before they are brought under the plough.*—The common clover is a biennial, or at most a triennial plant; and if not ploughed under before the third year, its advantages to the soil, as a green crop, are mostly or wholly lost; while, after the second year, it adds very little to the crop of hay. But if turned under the first or second year, it furnishes to the soil a great quantity of vegetable matter, the true food of plants. It not only serves as manure, but it benefits mechanically. Its tap roots penetrate and divide the soil, and as they decay, render it friable, and permeable to heat, air, and moisture. A well set clover lay imparts to the soil as much benefit, in our opinion, as ten loads of yard manure to the acre. When a broadcast crop is to be followed by a tillage crop, as corn, potatoes, or small grain, there is manifestly a decided advantage in stocking it with clover, though it is to be turned under the ensuing fall or spring.

We estimate its value, as manure, to say nothing of the pasture it affords, at from five to ten dollars per acre, while the cost of the seed does not ordinarily exceed one dollar. I have sown rye and clover, upon a piece of poor sandy land for which I had no manure to spare, three years in succession, with manifest advantage.

3. *The common method of curing clover hay is bad.*—The object to be obtained is, to cure the hay in the *cheapest* and *best* manner. The common practice of spreading clover from the swath, causes the leaves and blossoms to dry and crumble, ere the haulm or stalks are sufficiently cured. Thus either the finer parts of the hay are lost, or the crop is housed with so much moisture, as to cause it to heat, and often to spoil. Clover should only be spread when it has become wet in the swath, and should be gathered again before the leaves dry and crumble. Both these evils may be avoided, and labor saved withal, by curing the grass wholly in swath and cock. After experiencing the serious disadvantages of the old method, I adopted the one I am about to recommend, and have pursued it satisfactorily ten or a dozen years. My practice has been, to leave the clover to wilt in the swath, and when partially dried, either to turn the swaths, or to make grass cocks the same day, so as to secure the dried portions from the dew. That which is not put into cocks the first day, is thus secured the second day, or as soon as it has become partially dried. These grass cocks are permitted to stand one, two or three days, according as the weather is, and as the curing process has progressed, when they are opened at nine or ten o'clock on a fair day, the hay turned over betwen eleven and three, and soon after turning gathered again for the cart. Thus cured, the hay is perfectly bright and sweet, and hardly a blossom or leaf wasted. Some care is required in making the cocks. The grass is collected with forks and placed on dry ground, between the swaths, in as small a compass as convenient at the base, say two or three feet in diameter, and rising in a cone to the hight of four or five feet.

The advantages of this mode of curing clover are,

1. The labor of spreading from the swath is saved.

2. The labor of the hand rake is abridged or may be wholly dispensed with, if the horse rake is used to glean the field when the hay is taken off—the forks sufficing to collect it tolerably clean in the cocking process.

3. It prevents in a great measure, injury from dew and rain—for these cocks, if rightly constructed, (not by rolling) will sustain a rain of some days—that is, they have done this with me, —without heating or becoming more than superficially wet.

4. Clover hay made in this way may almost invariably be housed in good condition; and if rain falls after the grass is mown, the quality of hay is infinitely superior to what it would be under the old process of curing.

The *rationale* is this: The outside of the clover parts with much of its moisture while in swath; and what is called sweating, in cock, is merely the passage of moisture remaining in the succulent stocks, to their exterior, and to their leaves and blossoms—it is a diffusion—an equalization of the remaining moisture in the cock. When this has taken place, evaporation is greatly facilitated, and the whole mass acquires a uniform dryness, on opening the cocks to the influence of the sun and winds, if too long an exposure is guarded against. Evaporation progresses in the cocks, after the hay is gathered for the cart, and during the operation of loading and unloading.—*Cultivator.* B.

Hoeing Indian Corn.

As the season for hoeing Indian corn approaches, the writer of this article takes the liberty of suggesting to farmers in his vicinity, a few hints relative to earthing or hilling up at the second and third hoeings, or as it is commonly called, *half hilling* and *hilling*.

The practice of most farmers within my acquaintance is, at half hilling to accumulate the earth from two to four inches, and at hilling from three to five inches more, making each hill a pyramid of about seven inches elevation. The reason offered in support of this practice is, that the corn will stand firmer and more erect, and therefore be less liable to be broken down by the wind and rain.

More than fifty years' experience in this branch of agriculture has taught me that this is erroneous both in theory and practice. By accumulating earth upon the roots of the corn, they are deprived of that influence of the air and sun which are necessary to a healthy and vigorous growth.* Every one acquainted with the natural growth of this plant, must have observed the peculiar formation of the *brace roots* which sprout upon the stalk in a circular form a very little below the surface of the ground, radiating from the stalk in every direction. In like manner are the stalks of wheat, rye, barley, oats, &c. furnished with their brace roots, and stand in no need of hilling up to give them strength and firmness in their position. They are evidently designed to stay the stalk and hold it in an erect posture, not unlike the shrouds of a ship to sustain the mast. To render these braces sufficiently hard and strong to answer the design of nature, they must have the influence of the sun and air; but when buried by several inches of superincumbent earth, they become soft, weak, and brittle, and nature to remedy this evil sends out another set above the former. These occasion an unnecessary waste of the nourishment of the plant, and at that advanced season of the year never become sufficiently indurated to perform their office to the best advantage.

* It is well known where excavations are made in constructing canals and rail roads, and the earth to any considerable depth thrown upon the roots of large and healthy trees, it causes their death within a year or two, by placing their roots below the influence of the air, and warmth of the sun; the same effect is produced, and from the same cause, where timber land is flooded by water.

If those farmers who may take the trouble of reading this article, should doubt the correctness of this reasoning, they are respectfully invited to test it by experiment upon a few rows or hills. For many years past the writer has practiced upon the principles here recommended, and has uniformly been successful in his crop.

It may also be remarked that great injury is done both by the plough and the hoe at the time of hilling, by breaking and wounding the long fibrous roots so necessary to the growth and strength of the stalk. After the weeding or first hoeing, neither the plough or the hoe should be allowed to penetrate any deeper than is necessary to destroy the weeds and grass.

In cultivating the potato, the same reasoning so far as it respects the accumulation of earth, will apply—the bulb is formed simultaneously with the blossom bud. If, after that period there be much *hilling* up, the first formed bulbs grow but little; being out of the reach of that warmth and air which are required for a perfect growth, and another set above them is produced. Hence it is that by this mode of culture so great a proportion of the crop consists of small bulbs. Every cultivator must have observed that the largest potatoes in the hill are invariably found near the surface of the ground.—*Conn. Courant.*

Docking Horses.

A writer in the American Farmer has good ideas on the docking of horses, and proves it to be not only cruel but impolitic. We do believe that many persons are not aware of the injuries they inflict on the most serviceable of animals, in cutting and mangling their tails. But we subjoin the remarks of the writer to which we have alluded, and claim for them the attention of our agricultural readers: *Col. Sent.*

"I have long considered the practice of docking horses highly injudicious; and I now ask the favor of a little space for the insertion of my protest against it. It is, I believe, peculiar to this and the mother country, from which we derive it. In Spain, France and Italy, long tails are universal. The Cossacks, Arabs, and South Americans, who almost live on horseback, never dock their horses.

The tail is to the horse, highly useful and ornamental—nature makes no mistake; nothing superfluous is given to any animal. As a defence against the cold in winter, and flies in summer, its use is obvious. A horse that loses the smallest particle of his tail bone never has the free use of it. That he carries it more gaily in consequence of its having been docked, is a mistake.

As to *nicking* and *foxing*, practices of the same origin, still more cruel and absurd, they have gone so much out of fashion, that it is unnecessary to say any thing as to them. Nothing but a vitiated taste could have tolerated mutilations productive of so much deformity. I am happy to acknowledge that the practice of which I complain is gradually subsiding. The tail of a two year old appears to be too large for his body, because one has got its growth, the other not half. When he arrives at maturity this disproportion vanishes—all is symmetry.

But you will be told that carriage horses, particularly gig horses, must be docked, or they will throw their tails over the reins!—that saddle horses must be docked, because in wet weather their tails get muddy!—and that all horses should be docked, to improve their beauty. There is no accounting for taste. To improve his appearance the African files his teeth to resemble a saw; the Indian slashes and distends his ears, whilst the females of more *civilized* life are content with boring holes through the bottoms of their children's ears, thereunto suspending bunches of beads, coral, &c.; the Chinese compress the feet of their females until they are useless; and the South sea Islander of fashion, spends more than half of his life in tattooing his swarthy skin.

Those who breed horses for sale, lose more in this way than they are aware of. Bring to market two colts, as equal in merits as possible, one docked, the other not—and a preference from ten to twenty per cent. will be given to the one with a natural tail.

Gentlemen who do not reside on their estates, should prohibit their overseers, those great sticklers for customs, from docking colts. I have known several instances of fine colts being ruined in this way.

I am surprised that no notice has ever been taken of this grievance, (to the horse a sore one) by agricultural societies. Knowing you to be a warm friend of this noble animal, I submit his case in this respect to your care—he has many wrongs to complain of.

For the Genesee Farmer.

LUTHER TUCKER—I send you a paper containing two extracts from a French author, which I think merit a place in the Genesee Farmer. That on the dissemination of Plants, will throw light on the controverted question of chess; and the beautiful and learned viewrof the Death of Plants, tends to do away the theory of trees propagated by cuttings, decaying as the parent tree decays: a theory which I have never seen supported by well authenticated facts, or sound arguments. SILAS CORNELL.

Linden Hill.

From the Journal of Science and the Arts.

Of the Dissemination of Plants.

From the French of M. C. F. Brisseau Mirbel.

By dissemination, we mean to express the spontaneous dispersion of the seeds of the vegetable creation; an event, which, while it brings to a close the yearly round of the vegetative functions of the individual, becomes the means of giving perpetuity to its race. When completed, the organs of the plant in which existence surpasses one year, tend visibly to a state of inactivity, and in that where this concludes with the year, to decay; being then in fact the first stage of dissolution. When we see the fruit separate from the parent stem, its seams begin to open, the ligatures of the seed detach themselves from the placenta, we are not to place these appearances to the account of the energy of the vital principle, but, on the contrary, to view them as the certain indications of its having ceased in that portion of the vegetable where they occur. Fruit undergoes the destiny of the leaf in autumn, and is quickly reduced within the control of those laws which govern all inorganic matter. If of a succulent pulpy nature, the fluids ferment and turn sour, the texture collapses, and the whole is dissolved by putrefaction; if of a ligneous dry consistence, it follows precisely the course of the wood or the leaf in which vegetation has ceased.

In animals, the affection they bear their off spring, the instinct they are endued with for its protection and succour, their strength, their courage, their address, are all so many means of ensuring the perpetuity of their races; but to vegetables, sensation and the sources of spontaneous movement have been denied, and yet even here we see countless races appear before us on each revolving year, such as they appeared in the first days of their formation. Let us turn our attention to the causes of this wonderful stability in the races of vegetables.

The most efficient is without doubt the prodigious fecundity they are endowed with. Sir Kenelm Digby tells us that the fathers of the congregation of La Doctrine Chretienne at Paris, had in their possession, about the year 1660, a single barley plant with 45 straws, producing in the aggregate 18,000 corns of barley. Ray counted 32,000 seeds in the heads of one plant of poppy, and 360,000 on one tobacco plant. Dodart recounts of an elm that it produced 529,000 seeds. Yet none of these vegetables are among those of the foremost ranks in the degrees of fecundity. The number of seeds borne by a plant of Begonia, or Vanilla, but above all by a fern, confounds calculation.

Although many kinds, like those of angelica, fraxinella, and coffee, quickly spoil, and require to be sown almost as soon as ripe; yet the far greater proportion preserve the germinating faculty for years and even for ages. We have ourselves recently witnessed the growth of the seeds of a kind of kidney bean which had been taken from the Herbarium of Tourneforte.—Home sowed with success barley that had been gathered 140 years. Wheat has been discovered in subterraneous hoards, which had been lost and forgotten for time out of mind, in as perfect a state as the day it was reaped.

Insects, birds, and four footed animals, are the great destroyers of seed; yet their abundance is such as prevails over the voracity of their consumers; while some are defended from all risk by the hardness of their coverings, or the thorns which arm them, or the acrid and corrosive juices with which they are impregnated.

Spontaneous dissemination favorable to the development of individual plants, by preventing the too great accumulation of seed within a too narrow compass, is carried on in various ways. In the balsam, catchfly, fraxinella, sand box tree, &c. the valves of the seed vessel open with a spring that projects the contents to a distance from the parent plant. The gourd of the spirting cucumber, by a contraction which takes place at the moment of its fall, darts out the seed along with a corrosive fluid by a vent formed as it quits the stalk. The seed of the wood sorrel is contained in an extensile arillus or separate pouch, which dilates as the seed vessel grows, but at last the power of extension ceases in the pouch, when it bursts and shoots out the seeds by an elastic effort. Plants of a lower degree in the scale of organization, such as the mushrooms, have their peculiar means of disseminating the particles destined for their re-production. For instance, some of the species of Peziza impart a vibratory motion to the cap or cover which bears their seed when that is ripe. Puff balls, also of the mushroom tribe, burst at the top like the crater of a volcano,

and the seed is in such quantity and so fine that when it escapes it has the appearance of a volume of smoke. The capsules of ferns likewise open with a spring, an effect of their contraction in drying up when ripe. A like cause gives motion to the cilia or inner fringe which surrounds the urns or seed vessels of mosses. But although such partial phenomena may attract our curiosity, they act only a very subordinate part in the grand total of dissemination. There are other more general and powerful causes to be mentioned in this place.

Many seeds are as fine and volatile as the dust of the anther; the winds carry these away to scatter them on the plain, the mountain, the building, and in the very depth of the cavern. No place seems closed against the intrusion of the impalpable seeds of the various sorts of Moulds (*Mucores*)

Heavier seeds and fruits are furnished with wings, which support them in the air, and serve to waft them through great distances. The seed vessel of the elm is surrounded by a circular membraneous wing; that of the ash is terminated by one that is oblong. The keys or seed vessel of the maple has two large side wings. The seeds of the fir, the cedar, and the larch, are furnished with a wing of great fineness. The peduncle of the capsule of the lime tree adheres to a kind of broad bracte which plays the part of wings.

The seeds of syngenesious plants are furnished with a feathery crown or aigrette, and look like small shuttle cocks. The separate threads that compose this aigrette distending as they dry, serve as levers to lift the seed from the involucre that holds it, and when out, as a parachute to prevent its coming to the ground, and to buoy it in the air.

Linnæus suspects that the ERIGERON *canadense* came through the air from America to Europe, not at all an impossible thing. When once that syngenesious plant has found its way into any quarter, it is sure to disperse and sow itself round the whole neighborhood.

The funiculus (a cord which attaches the seed to its receptacle) of the dogsbane, swallowwort, periploca, &c. the calyx of several of the valerians and scabiouses, form of themselves elegant aigrettes, resembling those of the seed of the syngenesious plants.

Seeds are often carried by eddies of winds far from the spot on which they grew. Whirlwinds have been known to scatter over the southern coast of Spain those that had ripened on the northern coast of Africa.

Some fruits are closed hermetically, and so constructed as to swim on the water. These are carried to every distance by torrents and rivers, as well as the sea itself. Cocoa nuts, cashew nuts, and the pods of MIMOSA *scandens*, sometimes of the length of two yards, with many other fruits of the tropical regions, are cast upon the shores of Norway, in a state to vegetate, did the climate permit.

Regular currents transport the large double cocoa nut of the Sechelles, to the coast of Malabar at the distance of 400 leagues from whence it was produced. Fruits brought by the sea have sometimes discovered to uncivilized nations the existence of those islands which lay to the windward of their country. By such tokens Columbus, in the search of the American continent, was apprised that he was not far distant from the land of which he had prognosticated the existence.

Linnæus remarks that animals co-operate with great effect in the dissemination of seed.

The squirrel and cross bill are both very fond of the seed of the fir; to open the scales of the cones they strike them against stones, and thus set free and disperse the seed.

Crows, rats, marmots, dormice, convey away seeds to stock their hoards in out of the way places. These form their winter stores, but are often lost or forgotten, while their contents come up in the spring.

Birds swallow the berries, of which they digest only the pulp, but void the stones entire and ready to germinate. It is thus that the thrush and other birds deposit the seed of misletoe on the trees where it is found; and indeed destitute as this is of wings or aigrettes, it could not be disseminated in any other way, for it will not grow on the ground.

The Poke of Virginia (PHYTOLACCA *decandra*,) which was introduced by the monks of Corbonnieux into the neighborhood of Bordeaux, for the sake of coloring the wine, has been since disseminated by the birds throughout the southern departments of France, and in the deepest valleys of the Pyrenees.

The Dutch, with a view of monopolizing the trade of nutmegs, extirpated the trees on those islands which they could not watch so narrowly as the rest; but in a short time these very islands were re-stocked with nutmeg trees by the birds; as if nature refused to admit of such encroachment on her rights.

Granivorous quadrupeds disseminate the seed they do not digest. It is known to every one that horses infect the meadows with new weeds.

The fruit of the prickly seeded scorpion grass, of cleavers or goose grass, of the wood sanicle, are all provided with small hooks by which they lay hold of the fleeces of the flock, and accompany its migrations.

There are particular plants, such as the pellitory of the wall, the nettle, and the sorrel, that may be said to seek the society of man, and actually to haunt his footsteps. They spring up along the wall of the village, and even in the streets of the city, they follow the shepherd, and climb the loftiest mountain with him. When young I accompanied M. Ramond in his excursions in the Pyrenees, where that learned naturalist more than once pointed out to me these deserters from the plains below; they grow on the remains of ruined hovels, where they kept their station in defiance of the severity of the winters, and remained as memorials to attest the former presence of man and his flocks.

Distances, chains of mountains, rivers, the sea itself, are but unavailing barriers to the migration of seed. Climate alone can set bounds to the dispersion of vegetable races; that only draws the line which these cannot transgress. In process of time, it is probable that most of the plants which grow within the same parallels of latitude will be common to all the countries comprised in the entire zone of it; an event which would be one of the greatest blessings resulting from the industry and persevering intercourse of civilized nations. But no human power will ever force the vegetable of the tropics to endure the climate of the poles, nor *vice versa*. Here nature is too strong for man.

Species cannot spontaneously spread themselves from one pole to the other, the intermediate differences of temperature preventing such progress; but we may assist in transporting them, as we have done successfully in various instances. We have already transplanted the eucalypti, the metrosidera, the mimosas, the casuarinæ, and other plants of Terra Australis, into our own soil; while the gardens of Botany Bay are stocked with the fruit trees of Europe.

The dissemination of seed completes the round of vegetation. The shrub and the tree are bared of their foliage; the herb is dried up and returns to the earth from which it came. That earth appears to us as if stripped forever of her gay attire, yet countless germs wait but the stated season to re-adorn her with verdure and bloom. Such is the prodigal fertility of nature, that a surface of a thousand times the extent of that of our whole globe, would not suffice for the seed harvest of a single year, provided the whole was suffered to reappear; but the destruction of seed is endless, only a small portion escapes to rise again. In no way in our view are the power of nature and the immutability of its laws more strikingly displayed, than in the successive resurrections of the types of by-gone generations.

Health and Cleanliness.

In our last (see Gen. Far. page 203,) we gave some remarks on the importance of pure air and pure water as indispensable to health, and the methods by which farmers may best convert the poisonous gases, which emanate from manure heaps, &c. into food for plants. Since writing that article, we have had our attention directed to an essay in the *Companion to the British Almanac*, which relates in part, to the same subjects, but does not fall immediately nor exclusively under the cognizance, nor within the province of the cultivator. But, as every human being has a direct and all important interest in these topics, we shall make no apology for the following extract as a substitute for less valuable matter of our own fabrication.

We are all thoroughly aware of the necessity of breathing; and the agreeable freshness and revivifying influence of the pure morning air must convince us that the breathing a pure atmosphere is conducive to health; yet we as carefully exclude the air from our houses as if its approach were noxious. Intending to shut out the inclemencies of the weather only, in our care to guard ourselves against the external air, we hinder that renewal of the atmosphere, which is necessary to prevent its becoming stagnant and unfit to support animal life.

Few persons are aware how very necessary a thorough ventilation is to the preservation of health. We preserve life without food for a considerable time, but keep us without air for a very few minutes, and we cease to exist. It is not enough that we have *air*, we must have *fresh air*; for the principle by which life is supported is taken from the air during the act of breathing. One fourth only of the atmosphere is capable of supporting life; the remainder serves to dilute the pure vital air, and render it more fit to be respired. A full grown man takes into his lungs nearly a pint of air each time he breathes; and when at rest he makes about twenty inspirations in a minute. In the lungs, by an appropriate apparatus, the air is exposed to the action of the blood, which changes its purer part, the vital air (oxygen gas), into fixed air (carbonic acid gas), which is not only unfit to support animal life, but absolutely destructive of it. An admirable provision of the great Author of nature is here visible, to prevent this exhausted and now poisonous air from being breathed a second time:—while in the lungs the air receives so much heat as

makes it specifically lighter than the pure atmosphere; it consequently rises above our heads during the short pause between throwing out the breath and drawing it in again, and thus secures to us a pure draught. By the care we take to shut out the external air from our houses, we prevent the escape of the deteriorated air, and condemn ourselves to breathe over again the same contaminated unrefreshing atmosephere.

Who that has ever felt the refreshing effects of the morning air can wonder at the lassitude and disease that follow the continual breathing of the pestiferous atmosphere of crowded or ill ventilated apartments. It is only necessary to observe the countenances of those who inhabit close rooms and houses, the squallid hue of their skins, their sunken eyes, and their languid movements, to be sensible of the bad effects of shutting out the external air.

Besides the contamination of the air from being breathed, there are other matters which tend to depreciate its purity; these are the effluvia constantly passing off from the surface of animal bodies, and the combustion of candles and other burning substances. On going into a bed room in a morning, soon after the occupant has left his bed, though he be in perfect health, and habitually cleanly in his person, the sense of smelling never fails to be offended with the odor of animal effluvia, with which the atmosphere is charged. There is another case still more striking, when a person fresh from the morning air enters a coach in which several persons have been close stowed during a long night. He who has once made the experiment will never voluntarily repeat it. The simple expedient of keeping down both windows but a single half inch would prevent many of the colds, and even fevers, which this injurious mode of traveling often produces. Outside passengers, though they may suffer a little more from cold and wet, generally escape those every day complaints of those who pay double their fare. If under such circumstances the air is vitiated, how much more injuriously must its quality be depreciated, when several persons are confined to one room, where there is an utter neglect of cleanliness; in which cooking, washing, and all other domestic affairs are necessarily performed; where the windows are immovable, and the door is never opened but while some one is passing through it! On entering such a den of filth, the nose is saluted by a stench so horrible, as to make any person unused to it, recoil and pause before he ventures in; but the wretched inhabitant has his sense of smelling so blunted that he does not perceive that, with every breath he takes, he inhales a poison, which is sapping the vigor of his body, and destroying the energies of his mind.

A constant renewal of the air is absolutely necessary to its purity; for in all situations it is suffering either by its vital part being absorbed, or by impure vapors being disengaged and dispersed through it. *Ventilation, therefore, resolves itself into securing of a constant supply of fresh air.*

In the construction of houses, especially in those built for the poor, this great object has been too generally overlooked, when, by a little contrivance in the arrangement of windows, and doors, a current of air might at any time be made to pervade every room of a house of any dimensions. Rooms cannot well be ventilated that have no outlet for the air; for this reason there should be a chimney to every apartment. The windows should be capable of being opened, and they should if possible be situated on the side of the room opposite to and furthest from the fireplace, that the air may traverse the whole space of the apartment in its way to the chimney.

Fireplaces in bedrooms should not be stopped up with chimney boards. The windows should be thrown open for some hours every day, to carry off the animal effluvia, which are necessarily separating from the bed clothes, and which should be assisted in their escape by the bed being shaken up, and the clothes spread abroad, in which state they should remain as long as possible; this is the reverse of the usual practice of making the bed, as it is called in the morning, and tucking it up close as with the determination to prevent any purification from taking place. Attention to this direction with regard to airing the bed clothes and bed after being slept in is of the greatest importance to persons of weak health. Instances have been known in which restlessness and inability to find refreshment from sleep would come on in such individuals, when the linen of their beds had been unchanged for eight or ten days. In one case of a gentleman of very irritable habit, who suffered from excessive perspiration during the night, and who had taken much medicine without relief, he observed that for two or three nights after he had fresh sheets put upon his bed, he had no sweating; and that after that time he never awoke, but that he was literally swimming; and that the sweats seemed to increase with the length of time he slept in the same sheets. By not permitting him to sleep in the same sheets or night clothes more than twice without their being washed, he instantly lost his debilitating affection.—*N. E. Farmer.*

Tilling Orchards.

There are advantages and disadvantages in tilling an orchard. In tilled ground trees are the most vigorous and thrifty; and it seems to be in a measure necessary to plough a few years to give the young trees a start. Yet even at this period great care is required not to cut the roots with the plough. But when the trees have acquired six or eight years growth, and the roots become extended, still greater precaution is necessary, or the injury becomes serious. It is not altogether the large roots that are so liable to be cut, for these are often below the plough, but the innumerable fibers that spread in every direction, which escape the ploughman's notice, but which are literally the mouths that convey food to the plant. My practice has been, when an orchard is to be ploughed, to proceed first to dig the ground superficially with the spade, about the tree, two or three feet in breadth, and as many yards lengthwise of the furrows, so that there shall be no balk, and to run the plough shallow near the dug part: And where the orchard is in grass, to dig circles round the trees after harvest, both to facilitate growth, and to prevent injury, in winter from moles. There is no less caution necessary in using the spade than the plough, to preserve the roots entire. It is a good practice to cut the grass close with a hoe, and then to strew rotten chip dung, if mixed with a little lime the better, about the tree.

Raising Turneps.—Mr. W. Keese, of Peru, N. Y. gives the following method of preparing his ground:

"I have raised very fine turneps for two years past, simply by fencing a small piece of ground about the first of June, ploughing it, and yarding my sheep on it at night, until about the middle of July, when the seed was sowed and harrowed in. In this way I have not failed of having very large and very fine turneps."

Hints and Receipts.

Nothing is so good to take down swellings, as a soft poultice of stewed white beans, put on in a thin muslin bag, and renewed every hour or two.

The thin white skin, which comes from suet, is excellent to bind upon the feet for chilblains. Rubbing with Castile soap, and afterwards with honey, is likewise highly recommended. But, to cure the chilblains effectually, they must be attended to often, and for a long time.

Always apply diluted laudanum to fresh wounds.

A poultice of elder blow tea and biscuit is good as a preventive to mortification. The approach of mortification is generally shown by the formation of blisters filled with blood; water blisters are not alarming.

When people have a sore mouth, from taking calomel, or any other cause, tea made of low blackberry leaves is extremely beneficial.

An ointment of lard, sulphur, and cream of tartar, simmered together is good for the piles.—*Frugal Housewife.*

List of Subscribers

Who have paid for the 4th volume of the Genesee Farmer—continued.

Silas Cornell. | Isaac Cox.
Zera Burr. | George Carriel, to
Nathaniel Smith. | July 1, 1835.
Seth Stanley. | Marcus Morrison.

Horace Hills.

First half of Vol. 4.

C. Winsor. | Hosmer Merry.
J. B. Bristol. | Sewal Wood.

Last half of Vol. 4.

H. Woodworth. | Paul Coffin.

PRICES CURRENT.

ARTICLES.	PER	July 4. ROCHESTER.	June 30. NEW-YORK.
Ashes—Pot....	100lbs.	$3,25.....	$4,00 a 0,00
—— Pearl..	.....	3,50.....	4,30 a 0,00
Beeswax, yellow	lb.	0,16 a 0,18	20 a 21
Candles, mould	.....	0,10 a 0,11	13. a 14
—— dipped.	.....	0,09 a 0,10	11 a 12
Cloverseed.....	.....	6½.....	6 .a. 6½
Flax, American.	.....	.....	8..a. 8½
Flax seed, clean	tierce	9,00a10,00	10,50a11,00
Flour, Western.	barrel	4,50.....	4,87a5,00
Grain, Wheat..	bushel	0,87.....	1,06 a1,08
—— Rye....	.....	0,62.....	60..a..62
—— Oats...	.....	0,25..a..27	37..a..38
—— Corn...	.....	0,44.....	68..a..69
—— Barley..	.....	0,50..a..56	70..a..71
Hemp, Americ'n	ton	.....	100 a 125
Hops, 1st sort .	lb.	.....	10..a..11
Plaster Paris...	ton	6,00 a 0,00	2,62 a0,00
Beef, Mess....	barrel	0,00 a10,00	9,12 a9,75
—— Prime....	.....	0,00 a 8,00	5,62 a 5,75
Pork, Mess....	.....	14,00a15,00	13,25a14,00
—— Prime....	.....	11,00	9,25a10,50
—— in the hog.	100lbs.	4,00.....	.....
Tallow.....	.....	7,50 a 8,00	6,75 a 7,00
Hay.....	ton	7,00 a 8,00	9,00a11,20
Apples.....	bushel	50..a..100	.....

Superior Turnep Seeds.

WM. PRINCE & SONS, proprietors of the Linnæan Garden and Nurseries at Flushing, have all the following varieties of Turneps growing for the inspection of those who desire to view them, and they can, in consequence, guarantee the excellence and accuracy of their seeds, which they offer in large or small quantities, at very moderate prices, to venders and all others:

600 lbs. Ruta Baga, or Swedish Turnep, of the superior purple top variety,
400 lbs. Large White Norfolk Field, for cattle,
200 lbs. Fine Yellow Bullock, for cattle,
200 lbs. Fine Yellow Aberdeen, for cattle,
150 lbs. Yellow Flat, for table,
300 lbs. White Flat, for table and cattle,
250 lbs. White Globe.
250 lbs. Red Top, or Red Round,
100 lbs. Green Top, or Green Round,
100 lbs. Long Tankard, or Hanover,
150 lbs. Early White Garden Stone,
200 lbs. Early White Dutch,
100 lbs. Early Yellow Dutch,
100 lbs. Purple Top Yellow Scotch:

ALSO—Dale's Yellow Hybrid, Yellow Stone Six Weeks, Red Six Weeks, or Red Stone, Yellow Maltese, White Swedish, Yellow Altringham, Swan's Egg, French Early Long, French Long Yellow, French Black Sugar, Mouse Tail, or Six Weeks, Scarisbrook; or Preston Yellow, Freneuse Winter, Berlin or Teltan, &c., the whole forming a complete concentration of the choicest varieties obtainable in foreign countries or in our own.

They have also a most superior collection, comprising every other choice variety of vegetable, Field and Flower Seeds, most esteemed in European or American gardens, all of which they have likewise growing in specimen beds for inspection. A large number of the choicest varieties are entirely new.

Catalogues with prices will be sent to every applicant, and orders executed with the utmost exactitude and despatch.

N. B. 1000 lbs. superior Provence Lucerne, at 25 cts. july 5—f1t

Memoir of Lafayette.

M. P. J. R. Y. Gilbert Mottier Lafayette was born at Chavagnac in Auvergne, on the 6th of September, 1757, answering to the 17th of September, new style. He received his education at the College of Plessis, and was married at 16 years of age to M'lle de Noailes, daughter of the Duke D'Ayen. His biographies state that at that early age he conceived a dislike to the principles of the Court, and refused an appointment offered him through the influence of his father-in-law. The breaking out of the American war determined his conduct, and at the age of nineteen, he volunteered in the American armies. This disinterested step, as is well known, was taken in opposition to the remonstrances of his friends, the discountenance and commands of the Court, who ordered their frigates to interrupt and arrest him, and contrary to the counsels even of the American Envoys, who had tidings of nothing but disaster from home. His resolution was taken at the very darkest part of the war, when Washington was heard of in France, as retreating through the Jerseys, with two thousand ragged and barefooted militia before thirty thousand English veterans. Lafayette arrived at Charlestown in April, and was received into the family of Washington, and shortly appointed a major general. He fought as a volunteer at the battle of Brandywine, and was wounded in the leg. In the struggle which followed the occupation of Philadelphia, for the command of the passes of the Delaware, Lafayette commanded a corps on the Jersey side under General Green, and was for his services, appointed to the command of a division. The ensuing winter was signalized by the memorable cabal which intrigued for the removal of Washington, and the elevation of General Gates, as commander in chief. A board of war organized by his enemies, adopted a scheme for a Canada campaign against his advice, and appointed Lafayette to the command. He refused to act, except as subordinate to Washington, and throughout the difficulties, adhered zealously to Washington, and triumphed in the discomfiture of his enemies.

At the opening of the campaign of 1777, he acquired new reputation by his skill in saving a detachment of 2200 men, at Barren Hill, when nearly surrounded by Generals Howe and Clinton. In the battle of Monmouth which followed, he led the advanced guard until superseded by Gen. Lee, when he was assigned to the command of the second line. So active were his military services in various quarters, that soon after the battle of Monmouth, we find him leading one of the wings of Sullivan's army, in the attack upon Rhode Island, then in possession of the British. The failure of the French fleet to co-operate in this attack, and their returning to Boston to refit, produced, as is well known, violent disputes between the officers of the two nations, on which Lafayette repaired to Boston, and taking a decided part, aided in restoring harmony, and was back in Rhode Island time enough to bring his division skilfully off, in that retreat, so much commended by military men.

In the fall of that year he returned to France, loaded with the thanks and honors of Congress, and became at 20 years of age the theme of universal admiration. His exertions in conjunction with those of the American ambassadors, procured the grant of additional assistance from France, and his re-landing in Boston, in 1779, was followed by the arrival of Rochambeau, and his fleet. That year was marked by no leading action in which he was engaged. He commanded the advance guard of the northern army. In 1780 he was sent to counteract the movements of the traitor Arnold against Virginia. The French fleet failed to co-operate, and Lafayette was on his retreat, when he was remanded by Washington to protect Virginia against the combined forces of Phillips and Arnold, and subsequently of Cornwallis. Upon this field he displayed consummate ability. With inferior, ill-appointed, and undisciplined troops, he succeeded, by the rapidity of his movements, his fertility of resources, and the skill and prudence with which he maneuvered in securing his own troops, guarding his supplies, in foiling the plans of Cornwallis, and checking his career. When that General retired to Yorktown, under the command of his superior officer, Sir H. Clinton, Lafayette followed him closely, and when the plans of Washington had brought an overwhelming force against the British, he bore a leading part in the crowning victory of Yorktown. When the French and American forces, in a spirit of National emulation, attacked each a redoubt of the enemy, he was the head of the American corps. His services to the American Army closed with that battle. He sailed immediately afterwards for France, in an American frigate. In 1782 he led a French force of 8000 men to Cadiz, and assisted in the American negociations at Madrid.

The year 1784 was memorable for his first visit as a guest to this country. His reception here, if we may judge by the few accounts we have received of it, was not less enthusiastic than his subsequent one, at the distance of forty years.—Congress, State Legislatures, Corporations, and Citizens in their individual relations, vied with each other in paying him the highest honors, and giving him the most affectionate welcome. In 1785 he made a visit to the German Courts, and was received with great distinction by the Emperor Joseph IId, and Frederick the Great of Prussia. From that time until the commencement of the French Revolution he appears to have chiefly employed himself in meliorating the condition of the Protestants, and encouraging the emancipation of slaves.

His agency in the scenes of the French Revolution is the next in order. To follow him understandingly step by step through that bloody and anarchical period requires a more minute detail of contending parties, and wider acquaintance with French history than are within our power to give. A few prominent facts must suffice.

In 1787 he was a member of the Assembly of *Notables*, in which he moved, among other reforms, the suppression of *letters de cachet*, and state prisons, and obtained a decree in favor of religious liberty for the call of Protestants. He made the first demand for the call of a National Assembly. As member of the Provincial Assembly of *Auvergne*, he was the first to sign the protest of that province against arbitrary power; and as Deputy to the States General, he proposed on the 11th July, 1789, the first European Declaration of Rights, and at a time when the Assembly was surrounded and menaced by troops. During the ensuing week, he acted as President of the Assembly, headed a committee of sixty sent to Paris, was proclaimed Commandant General of the Civic Guard, proclaimed the order for demolishing the Bastile, and received the King at the head of two hundred thousand armed men. Shortly after the excesses of the Revolution alarmed him and he retired from the command; re-assumed it again, and on the establishment, by his influence, of the National Guard, was chosen their chief.

Next followed the violent scenes of the 5th and 6th of October, when he resisted for eight hours the crowds that were pressing to attack Versailles, and defended the royal family from the insurgents. The ensuing two years are full of political events, in which he acted a distinguished part in favor of moderate measures, looking for substantial reforms in public affairs, at the same time that he discountenanced anarchical proceedings. He rejected repeatedly all offers of personal elevation; he refused the office of Grand Marshal, that of Constable, and that of Lieutenant General. He repelled the proposition of creating a dictatorship.

The flight of the King, (April 11th, 1791,) and the agency of Lafayette on that occasion are well known. The good faith with which he acted, is now, we believe, universally admitted.—His resignation of the command of the National Guard soon followed, and his retirement into the country, from which he was summoned to take charge of one of the three French armies, each of 50,000 men, then raised. Luckner and Rochambeau were the other generals. His share of the campaign was to march into the Netherlands. At that date he openly broke with the Jacobins and in his famous letter to the National Assembly, of the 16th of June, denounced the fury and licentiousness of the Jacobin Club. The subsequent events formed a crisis in French history. The appearance of Lafayette at the bar of the Assembly, his denouncement by the Jacobin orators, his resistance to the anarchists, his attempts to save the royal family, his struggles during the fatal 10th of August, and his final defeat and flight, before the triumphant Jacobins—are among the stirring events of the memorable month of August, 1792, in which the fate and failure of Lafayette precipitated the destruction of the monarchy, and led to those monstous excesses by which the Jacobins exterminated the Girondists, and established the reign of terror.

In his flight from France, he fell, at Rochfort, into the hands of the Austrians, and after being confined first at Wesel, and then at Magdeburgh, was finally thrust into the dungeons of Olmutz. His companions in suffering were Latour Mabourg, Alexander Lameth, and Bureau de Puzy. The treatment of these illustrious men by the Austrian Emperor, the magnanimous devotion of the wife of Lafayette to her husband, in his adversity and imprisonment, and the gallant attempt to rescue him projected by two young Americans, Dr. Bollman and Mr. Huger, are familiar to most readers. Every attempt of the friends of liberty in Europe and America, aided by the interposition of our own government, failed to procure the release of Lafayette.

Nothing moved the vengeful and obdurate Emperor, but the triumphant career of Bonaparte, and even after the great Campaign of Italy, when army after army of the Austrians was captured or beaten back by the young French hero, it took five months of negotiation to obtain the surrender of these prisoners. Their release took place on the 13th of September, 1798. He remained some time in Holland, taking no part in the public affairs, until the revolution of the 18th Brumaire, so called, in which Bonaparte subverted the Directory, and established the Consulate. He then returned to France, and adhered to the existing order of things, supporting it by his vote, but refusing to take any part in the government.

He gradually alienated himself from Bonaparte, voted against the Consulship for life, and while Napoleon proceeded in a career of glory and despotism, Lafayette retired to his farm, and lived in retirement until after the return of Napoleon from Elba. Then, when the flagitious coalition of all Europe undertook to expel the French ruler and impose the Bourbons upon France, Lafayette issued from his retirement, and took his place as a resolute defender of his country against invasion and intrigue, and to maintain the principles of the revolution of 1789 against foreign force, and domestic treachery. The issue is before the world. He failed again, and France has for twenty years paid a fearful penalty for not listening to his counsels.

The subsequent events of his career, his visit to this country in 1825, and the position he occupied in the revolution of 1830, are too recent in the memory of our readers to need recapitulation.

How to have Mischievous Cattle.—Some farmers have a peculiar faculty of learning their cattle to jump and push down fences. We conclude that this may be done by making a fence three or four rails high in the first place, and as soon as the cattle, horses or sheep, have practiced sufficiently on this, add one rail more, and they will soon learn to get over it; to this add rails and stakes sufficient to make a good fence, and we pledge you our word your cattle will trouble you occasionally, as the fence becomes weak. Now what is gained by this course? Nothing; but much lost. The fence has cost *double* what it would have done to have built it properly in the first place. Crops are destroyed, the reputation of the stock injured, consequently their sale, friendship with neighbors broken, &c. This is training them in the way they should *not* go. But if you train them in the *spring* in the way they *should* go, in the summer and fall they will not depart from it.—*Farmer's Reporter.*